be limited, as the Act provides, to equalizing the rates to health care providers for existing, available services in rural areas with the rates for comparable service in urban areas. In addition, support should be limited to <u>full-time</u> health care facilities and only for those services actually used by such providers solely in connection with providing health care.<sup>74</sup>

# XI. Only Telecommunications Carriers May Receive Support Payments For Services Provided to Schools and Libraries.

Bell Atlantic agrees with the Joint Board's recommendation that schools and libraries should receive discounts for telecommunications services, <sup>75</sup> subject to the absolute prohibition contained in the Act on resale by both educational institutions and by any other entity. <sup>76</sup> The goal of promoting the education of both students and the community as a whole will be furthered by giving schools and libraries discounted telecommunications services and access to advanced telecommunications and information services. <sup>77</sup> This goal will be furthered by adoption of the Joint Board's proposal. The Act, however, limits the Commission's role to determining the discount level for interstate services, giving states exclusive authority to prescribe rate levels for intrastate telecommunications services for schools and libraries. <sup>78</sup> Accordingly, the discount levels adopted in this proceeding must be limited to interstate services.

<sup>&</sup>lt;sup>74</sup> See 47 U.S.C. §§ 254 (e) and 254(h)(5)(B).

<sup>&</sup>lt;sup>75</sup> RD at ¶¶ 555-56.

<sup>&</sup>lt;sup>76</sup> Id. at ¶ 597. See 47 U.S.C. § 254(h)(3).

<sup>&</sup>lt;sup>77</sup> 47 U.S.C. § 254(h)(1)(B) and (2).

<sup>&</sup>lt;sup>78</sup> 47 U.S.C. § 254(h)(1)(B).

The Joint Board also recommends that the "services" that may receive discounted support be expanded beyond telecommunications services to include inside wiring to each classroom and subscription payments to Internet Service Providers.<sup>79</sup> Under the principle of competitive neutrality, it proposes that any provider of these wiring and Internet services which a school or library selects may receive reimbursement.<sup>80</sup>

Although the Board's goal is laudable, the Commission is powerless to adopt it.

The 1996 Act limits universal service fund reimbursement to entities that are

"telecommunications carriers."<sup>81</sup> Providers of inside wiring and Internet access services may include a wide range of entities, including, but in no way limited to, telecommunications carriers.

As a result, the Commission must limit recovery from the universal service fund for inside wiring and Internet access to telecommunications carriers. Given this narrowing of education universal service support, the Joint Board's recommended cap of \$2.25 billion on annual education support <sup>83</sup> is excessive and should be reduced.

<sup>&</sup>lt;sup>79</sup> RD at ¶¶ 462-65, 473-84.

<sup>&</sup>lt;sup>80</sup> *Id*.

<sup>81</sup> See, e.g., 47 U.S.C. §§ 254 (e), 254 (h)(1)(B) and (2).

Bell Atlantic has been conducting "Net Days" throughout its region, in cooperation with state and local education officials, the Communications Workers of America, and other organizations and companies. These programs will continue well into 1997. Bell Atlantic contributes inside wiring kits and instructions, and its employees, working with the schools and community volunteers, donate their skills to install wiring inside the schools. The goal of this program is to provide, through private, voluntary efforts, the inside wiring services that the Joint Board recommends be subsidized through the universal service fund. In addition, Bell Atlantic-Washington, D.C., Inc. has recently agreed to contribute \$3 million over the next few years, among other purposes, to provide Internet access to schools and libraries in the District of Columbia.

<sup>83</sup> See RD at ¶ 556.

# XII. SLC and CCL Issues Should Be Deferred To Access Reform.

Bell Atlantic supports the Joint Board's recommendation to remove Long Term Support ("LTS") from access and to include such support in the universal service mechanism. <sup>84</sup> The Commission should not, however, adopt the Board's further recommendation to reduce the subscriber line charge ("SLC") by apportioning to the SLC a portion of any reduction in the carrier common line ("CCL") charge. <sup>85</sup> Under the Commission's rules, CCL recovers common line costs not recovered by the SLC (called the "base factor overflow"), <sup>86</sup> NECA LTS payments, <sup>87</sup> and pay telephone costs. <sup>88</sup> The LTS costs, which the Joint Board recommends be recovered through the universal service charge mechanism, <sup>89</sup> and the pay telephone station equipment costs, which are in the process of being removed from the CCL, <sup>90</sup> are not common line costs. The SLC, however, is limited to recovery of common line costs, not LTS and pay telephone station equipment costs (which were assigned only to CCL, not SLC). <sup>91</sup> It would,

<sup>&</sup>lt;sup>84</sup> RD at ¶ 768.

<sup>&</sup>lt;sup>85</sup> *Id*. at ¶ 773.

<sup>&</sup>lt;sup>86</sup> 47 C.F.R. § 69.502.

<sup>&</sup>lt;sup>87</sup> 47 C.F.R. § 69.612.

<sup>&</sup>lt;sup>88</sup> 47 C.F.R. § 69.103.

<sup>&</sup>lt;sup>89</sup> RD at ¶¶ 767-68.

Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, Report and Order, CC Docket No. 96-128, FCC 96-388, ¶¶ 128, 183-84, 187 (rel. Sept. 20, 1996); See also, Order on Reconsideration, FCC 96-439, ¶¶ 142, 191-92, 194 (rel. Nov. 8, 1996).

<sup>91</sup> See 47 C.F.R. §§ 69.103, 69.501.

therefore, be inappropriate for the Commission to reduce the SLC to reflect reductions in costs that were never part of the rate element that the SLC was designed to recover.

Bell Atlantic agrees that Commission examination of SLC levels and CCL recovery is long overdue. However, that examination should be undertaken in the Commission's forthcoming access charge proceeding, rather than in the context of universal service, because the issues are intimately related to the restructuring of access charges and should not be addressed here, in isolation. It would be appropriate for the Commission to ask for comments on the Joint Board's recommendations as part of that proceeding.

Wherever the Commission addresses these issues, it must insure that LECs obtain full cost recovery. However the SLC and CCL are restructured, the Commission must allow LECs to recover all of the common line costs, as defined in the Commission's rules, that are currently recovered through SLC and CCL charges. 92

# XIII. Conclusion

The Joint Board has developed a comprehensive proposal to carry out the provisions of Section 254 of the 1996 Act to maintain universal service to high-cost areas and low-income subscribers, and to introduce new support mechanisms for schools, libraries, and rural health care providers. By adopting the Board's recommendations, with the changes that Bell Atlantic proposes, all of which are required by statute or public policy, the Commission will

<sup>&</sup>lt;sup>92</sup> See 47 C.F.R. § 69.104-05.

have met Congressional intent to preserve and advance universal service well into the next century.

Respectfully Submitted,

The Bell Atlantic Telephone Companies

By their Attorney

Edward D. Young, III Betsy L. Anderson Of Counsel

December 19, 1996

Lawrence W. Katz

1320 North Court House Road 8th Floor Arlington, Virginia 22201 (703) 974-4862

#### **Declaration of Robert W. Crandall**

#### I, Robert W. Crandall, declare as follows:

- 1. I am a Senior Fellow in Economic Studies at the Brookings Institution in Washington, DC, a position that I have held since 1978. Prior to that I was Acting Director, Deputy Director, and Assistant Director of the Council on Wage and Price Stability in the Executive Office of the President, and in 1974-75 I was an adviser to Commissioner Glen Robinson of the Federal Communications Commission. I was an Assistant Professor and Associate Professor of Economics at MIT between 1966 and 1974. I have written widely on telecommunications policy, the economics of broadcasting, and the economics of cable television. I am author or co-author of four books on communications policy published by the Brookings Institution since 1989: Changing the Rules: Technological Change, International Competition, and Regulation in Communications (with Kenneth Flamm), 1989; After the Breakup: U.S.

  Telecommunications in a more Competitive Era, 1991; Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications (with Leonard Waverman), 1996; and Cable TV: Regulation or Competition? (with Harold Furchtgott-Roth), 1996. A copy of my curriculum vitae is attached.
- 2. I have been asked by Bell Atlantic to provide an analysis of two aspects of the Joint Board's recommendations to the Commission on principles to be used in establishing a universal-

<sup>&</sup>lt;sup>1</sup>The views expressed herein are solely my own and should not be taken to represent the views of the Brookings Institution, its other staff members, or its Trustees.

service policy. Specifically, I have been asked to comment on (1) alternatives for assuring that the contributions to a universal-service fund be competitively neutral and (2) the appropriate use of proxy models in determining the levels of high-cost support.

# **Competitive Neutrality**

- 3. The 1996 Act requires that "Every telecommunications carrier that provides interstate telecommunications services shall contribute, on an equitable and non-discriminatory basis... to mechanisms established by the Commission to preserve and advance universal service." The Commission's NPRM asked for suggestions on structuring such contributions to the universal-service fund so as to satisfy, among other goals, the principle of "competitive neutrality" among telecommunications carriers. In its Recommendations to the Commission, the Joint Board concluded that a charge based on gross revenues from interstate and intrastate services net of transfer payments to other carriers would satisfy this objective.
- 4. The principle of competitive neutrality requires that all competitors contribute to the fund and that the contributions not be structured to allow some carriers to gain at the expense of others. However, most of the burden of these charges will be borne by telecommunications users, not by the carriers themselves, since these contributions are essentially taxes on telecom services that will be passed on to final consumers of the services. Thus, in fulfilling its role to fund universal service subsidies in a manner consistent with the public interest, the Commission should not be concerned about the identity of the particular telecommunications firms making the direct

payments into the universal-service fund, but rather it should insure that the contribution mechanism does not unfairly penalize any identifiable competitor or set of competitors in the marketplace.

- 5. The Joint Board's recommendation that all interstate carriers contribute on the basis of their revenues less payments to other carriers is based on its professed view that such a system is both administratively simple and competitively neutral. It rejected the suggestion that the payments simply be based on retail revenues on the dubious ground that such a payment would "relieve" wholesale carriers from **directly** contributing to support mechanisms. This rejection apparently reflects a misunderstanding of the impacts of the two alternative systems. This can be seen by examining the effects of any contribution level <u>i.e.</u>, tax rate imposed in each manner.
- 6. Begin by assuming that retail services are offered today at 15 cents per minute regardless of time or geographic location and that "wholesale carriers" the LECs supply originating and terminating service at a price of 2.5 cents per minute on each end. If the contribution rate is 10 percent, a contribution based on net revenues less transfer payments would find the retail service provider, the IX carrier, paying 10 percent of 10 cents per minute (15 cents revenue less 5 cents in transfer payments for originating and terminating access) or 1 cent per minute of service and the LECs the wholesalers paying 10 percent of 5 cents per minute, or 0.5 cents per minute in toto. If the LECs are permitted to pass this 0.5 cents forward to their customers, the IX carriers, the IX carriers incur 0.5 cents per minute in higher access charges and 1 cent per minute in contribution charges, or 1.5 cents per minute in all.

- 7. Now, assume that the contribution is based on **retail** revenues. The retail IX carrier would contribute (be taxed) at a rate of 10 percent of its 15 cents per minute retail rate. Its contribution would still be 1.5 cents per minute. The effect of the two systems on the IX carrier and therefore retail customers should be identical. In a constant-cost, competitive interstate market, the 1.5 cents per minute would be passed on completely to consumers, who would reduce their use of the retail service by 10 percent times their price elasticity of demand.
- 8. The "burdens" of these two contribution payment systems are the same. Customers would suffer losses in consumer surplus, and both the IX carrier and the wholesale carriers the LECs would encounter the same reductions in the demand for their services. There is no essential difference between the systems as long as the regulated LECs are allowed to pass the contribution charges on to their downstream customers in the form of higher access charges or in surcharges on rates for unbundled network elements. Therefore, the Joint Board's recommendation of requiring contributions to be based on revenues less transfer payments to other carriers is competitively neutral only if the regulated LECs are permitted to adjust their rates for the contributions tax. Otherwise, the LEC shareholders unlike the shareholders of the unregulated IXCs, who may freely adjust their rates would be required to shoulder the burden of the contributions charges.
- 9. Since the new Universal Service contribution system would be an "exogenous" change in regulatory policy, each LEC should be allowed to adjust its interstate rate cap or otherwise reflect this charge in its customer rates. Otherwise, the assumptions that lie behind the FCC's

price-cap regulation are violated as is the principle of competitive neutrality. The non-dominant (i.e., largely unregulated) retail carriers will be permitted to pass on these charges to final customers in the form of higher rates; the regulated LECs must be allowed to do the same.

Clearly, the Commission could be spared a great deal of administrative costs by simply levying the contribution charge on retail services.

10. Finally, the Joint Board's recommendation that universal service contributions for interstate carriers be based on all telecommunications revenues --- whether interstate or intrastate --- violates the principle of competitive neutrality and will create unfortunate distortions in the marketplace. Those carriers offering both interstate and intrastate services may be competing in the intrastate market with other carriers who do not offer interstate services. The former carriers would be forced to contribute in proportion to their total revenues, including intrastate revenues, under the Joint Board's recommended plan, but the latter carriers, which could include new entrants into local-exchange service markets, would make no contributions. Thus, carriers operating in both the interstate and intrastate jurisdiction would face a competitive handicap in competing in the intrastate market. If the contribution rate were high enough, carriers operating in both jurisdictions would be forced to consider spinning off either their interstate or intrastate operations to avoid contribution charges, thereby sacrificing economies of scope just to avoid the unfortunate handicap imposed by a federal universal service policy.

# Use of the Cost Proxy Model for High-Cost Assistance

- 11. The Joint Board has recommended that payments to carriers in high-cost areas be determined by the difference between the estimated cost of service and a nationwide "benchmark" rate that reflects the Commission's judgment about the affordability of service. The estimated cost would be determined by reference to a "proxy" model of the LECs' costs, based on a forward-looking engineering estimate of an "efficient carrier."
- 12. The Joint Board's recommendation that high-cost assistance be based on engineering estimates of serving a given geographic area will encourage carrier efficiency, an incentive lacking in the current system of providing subsidies to high-cost carriers. The current system needlessly discourages carriers in high-cost areas from minimizing their costs through improved technology or more efficient operations. The use of a proxy model that bases the high-cost subsidies on a nationwide estimate of the cost of serving areas of a particular population density would encourage greater efficiency among high-cost, rural carriers. The model could, however, be developed on a state by state basis and have the same effect. Alternatively, these high-cost payments could be based on embedded costs over an entire state or over the entire country and still be structured in a manner that encourages efficiency.
- 13. A proxy model based on the most efficient technology for serving various areas of the country may be useful in reflecting the **differences** in costs across various areas and therefore could be used to allocate the high-cost funds fairly and reasonably efficiently. No such model can

be a completely accurate estimate of an existing carrier's or a new carrier's costs of serving a given set of subscribers efficiently, but the differences in estimated costs from a proxy cost model across areas of different densities may reflect differences in the underlying, necessary costs of building and operating facilities. Nevertheless, use of the proxy model will not compensate incumbent LECs fully for the difference between their embedded costs and the benchmark rate.

- 14. Moreover, the Commission should not conclude that the reasonableness of a proxy cost model for distributing subsidy monies is grounds for using it for other purposes. To the extent that such a model fails to allow for all the costs of providing various services, the carriers in high-cost areas can respond by seeking regulatory approval for adjustments in their retail dialtone rates. If the proxy model is used for other purposes, such as the structuring of interstate carrier access charges, the LECs have no such recourse. Use of proxy models that do not include all embedded costs necessarily result in rates that are below the carrier's actual costs. Since the regulated rates for all services, including carrier access rates, must be structured to allow the LECs to recover their actual costs, a proxy model cannot be used as the basis for setting all of these regulated rates. Even rate caps are designed to permit this full cost recovery when the LECs achieve productivity growth consistent with the productivity-growth offset (X) in the rate-cap formula. Use of a proxy model to recalibrate rates not only violates the purpose of the rate cap regime, but it fails to allow the LECs the opportunity to recover their full costs.
- 15. Therefore, the Commission should clearly distinguish the design of a cost model for the purpose of allocating high-cost universal-service subsidies from the cost model that is required

8

to set rates such as carrier access rates. The latter must be designed very carefully to insure that ILECs are not forced to operate with less than fully-compensatory rates. The former is simply a mechanism for allocating federal subsidies that are a discretionary part of the recovery of rural carriers' costs.

I declare under penalty of perjury that the foregoing is true and correct to the best of my belief and knowledge.

Executed on December 19, 1996.

nut W. Chudall (13)
Robert W. Crandall

#### **CURRICULUM VITAE**

#### ROBERT W. CRANDALL

#### **CURRENT POSITION:**

Senior Fellow, The Brookings Institution, 1978 - Present Fields of Specialization: Industrial Organization, Antitrust Policy, Regulation

#### **PREVIOUS POSITIONS:**

Adjunct Professor, School of Public Affairs, University of Maryland, 1987 - 1993
Deputy Director, Council on Wage and Price Stability, 1977 - 1978
Acting Director, Council on Wage and Price Stability, 1977
Adjunct Associate Professor of Economics, George Washington University, 1975 - 1977
Assistant Director, Council on Wage and Price Stability, 1975 - 1977
Associate Professor of Economics, M.I.T., 1972 - 1974
Assistant Professor of Economics, M.I.T., 1966 - 1972
Johnson Research Fellow, The Brookings Institution, 1965 - 1966
Instructor, Northwestern University, 1964 - 1965
Consultant to Environmental Protection Agency, Antitrust Division Federal Trade
Commission, Treasury Department, various years

#### **EDUCATION:**

Ph.D., Economics, Northwestern University, 1968 M.A., Economics, Northwestern University, 1965 A.B., Economics, University of Cincinnati, 1962

# **HONORS and AWARDS**:

Phi Beta Kappa

#### MEMBERSHIPS:

American Economic Association Board of Directors, Baltimore Life Insurance Company Board of Directors, Economists Incorporated

#### PERSONAL DATA:

Place and Date of Birth: Akron, Ohio; February 28, 1940

Home Address:

5100 - 38th Street, NW

Washington, DC 20016

# **PUBLICATIONS:**

# Books:

<u>Talk is Cheap: The Promise Of Regulatory Reform in North American</u>
<u>Telecommunications</u>. (with Leonard Waverman) Washington: The Brookings Institution, 1995.

The Extra Mile: Rethinking Energy Policy for Automotive Transportation. (with Pietro S. Nivola) Washington, DC: The Brookings Institution/Twentieth Century Fund, 1995.

Manufacturing on the Move. Washington, DC: The Brookings Institution, 1993.

After the Breakup: The U.S. Telecommunications Industry in a More Competitive Era. Washington, DC: The Brookings Institution, 1991.

Changing the Rules: Technological Change, International Competition and Regulation in Communications. (Edited with Kenneth Flamm), Washington, DC: The Brookings Institution, 1989.

Up from the Ashes: The U.S. Minimill Steel Industry. (With Donald F. Barnett), Washington, DC: The Brookings Institution, 1986.

Regulating the Automobile. (With Howard K. Gruenspecht, Theodore E. Keeler, and Lester B. Lave), Washington, DC: The Brookings Institution, 1986.

Controlling Industrial Pollution: The Economics and Politics of Clean Air. Washington, DC: The Brookings Institution, 1983.

The Scientific Basis of Health and Safety Regulation. (Ed. with Lester Lave), Washington, DC: The Brookings Institution, 1981.

The U.S. Steel Industry in Recurrent Crisis. Washington, DC: The Brookings Institution, 1981.

#### Articles and Contributions to Edited Volumes:

"Managing the Transition to Deregulation in Telecommunications," in Steven Globerman, W.T. Stanbury, and Thomas A. Wilson (eds.), <u>The Future of Telecommunications Policy in Canada</u>. University of British Columbia and the University of Toronto, 1995.

"Productivity Growth in the Telephone Industry Since 1984," (with Jonathan Galst) in Patrick Harker (ed.), The Service Productivity and Quality Challenge, Dodrecht: Kluwer Academic Publishers, 1995, Chapter 14.

"Cable Television: Reinventing Regulation," The Brookings Review, Winter 1994, pp. 12-15.

"Explaining Regulatory Policy" (with Clifford Winston), <u>Brookings Papers on Economic Activity</u>, <u>Microeconomics</u>, 1994, pp. 1-31.

"Regulatiuon and the "Rights" Revolution: Can (Should) We Rescue the New Deal?" Critical Review, Vol. 7 Nos. 2-3, 1993, pp. 193-204.

"Comment: Transactions Prices," <u>Price Measurement and Their Uses</u>, (Murray F. Foss, Marilyn E. Manser, and Allan H. Young, eds.), University of Chicago Press, 1993.

"Pollution Controls" in David R. Henderson (ed.), <u>The Fortune Encyclopedia of Economics</u>, New York: Warner Books, 1993.

"Relaxing the Regulatory Stranglehold on Communications," Regulation, Summer 1992, pp. 26-35.

"Regulating Communications: Creating Monopoly While Protecting Us From It," <u>The Brookings Review</u>, Summer 1992, Volume 10, No. 3, pp. 34-39.

"Policy Watch: Corporate Average Fuel Economy Standards," <u>Journal of Economic Perspectives</u>, Spring 1992, pp. 171-80.

"Why Is the Cost of Environmental Regulation So High?" Center for the Study of American Business. St. Louis: Washington University, Policy Study No. 110, February 1992.

"Liberalization Without Deregulation: Telecommunications Policy During the 1980s," Contemporary Policy Issues, October 1991.

"Halfway Home: U.S. Telecommunications (De)Regulation in the 1970s and 1980s," in Jack High (ed.), <u>Regulation: Economic Theory and History</u>. Ann Arbor: The University of Michigan Press, 1991.

"Efficiency and Productivity," in Barry G. Cole (ed.), After the Breakup: Assessing the New Post-AT&T Divestiture Era. New York: Columbia University Press, 1991.

"The Politics of Energy: New Fuel Economy Standards?" (with John D. Graham), <u>The American Enterprise</u>, March/April 1991.

"The Clean Air Act at Twenty," Journal of Regulation and Social Costs, September 1990.

"Fragmentation of the Telephone Network" in Paula Newberg (ed.), <u>New Directions in Telecommunications Policy</u>. Durham, NC: Duke University Press, 1989.

"The Effect of Fuel Economy Standards on Automobile Safety," (with John D. Graham), Journal of Law and Economics, April 1989.

"Surprises from Telephone Deregulation and the AT&T Divestiture," <u>American Economic Review</u>, May 1988, pp. 323-327.

"The Regional Shift of U.S. Economic Activity" in Robert E. Litan, et al., American Living Standards, Washington, DC: The Brookings Institution, 1988.

"Deregulation and Divestiture in the U.S. Telecommunications Sector" in <u>Economic Deregulation</u>: Promise and Performance. Proceedings of the 1987 Donald S. MacNaughton Symposium, Syracuse University, 1988.

"Whatever Happened to Deregulation?" in David Boaz (ed.), <u>Assessing the Reagan Years</u>. Washington, DC: The CATO Institute, 1988.

"Regulatory Reform: Are We Ready for the Next Phase?" in <u>The Brookings Review</u>, The Brookings Institution, Winter 1988/89.

"Telecommunications Policy in the Reagan Era," Regulation, Washington, DC: American Enterprise Institute, 1988, Number 3, pp. 18-19.

"A Sectoral Perspective: Steel" in Robert M. Stern, et.al. (eds.), Perspectives on a U.S.-Canadian Free Trade Agreement, Washington, DC: The Brookings Institution, 1987.

"The Effects of U.S. Trade Protection for Autos and Steel," <u>Brookings Papers on Economic Activity</u>, 1987:2, The Brookings Institution.

"Has the AT&T Breakup Raised Telephone Rates?" in <u>The Brookings Review</u>, Winter 1987.

"Public Policy and the Private Auto," (with Theodore E. Keeler) in Gordon, et.al. (eds.), Energy: Markets and Regulation, Essays in Honor of M.A. Adelman. Cambridge, MA: MIT Press, 1986

"Materials Economics, Policy, and Management: An Overview," with Michael B. Bever, in Encyclopedia of Materials Science and Engineering, Pergamon Press, 1986.

"Metals Industries: International Structure," in Encyclopedia of Materials Science and Engineering, Pergamon Press, 1986.

"The Steel Industry in Transition," <u>Materials and Society</u>, Pergamon Journals Ltd., Vol. 10, No. 2, 1986.

"The Public Interest in Metals Policy," in David A. Gulley and Paul Duby (eds.), <u>The Changing World Metals Industries</u>. New York: Gordon and Breach, 1986.

"Economic Rents as a Barrier to Deregulation," The CATO Journal, Spring/Summer 1986.

"The Transformation of U.S. Manufacturing," <u>Industrial Relations</u>, Spring 1986. "Investment and Productivity Growth in the Steel Industry: Some Implications for Industrial Policy," in Walter H. Goldberg, <u>Ailing Steel: The Transoceanic Quarrel</u>, Gower, 1986.

"The EC-US Steel Trade Crisis," in Loukas Tsoukalis (ed.), <u>Europe</u>, <u>America</u>, and the <u>World Economy</u>, Oxford: Basil Blackwell, 1986.

"Why Should We Regulate Fuel Economy at All?" in The Brookings Review, Spring 1985.

"An Acid Test for Congress," Regulation, September/December 1984.

"Import Quotas and the Automobile Industry: The Costs of Protectionism," The Brookings Review, Summer 1984.

"Automobile Safety Regulation and Offsetting Behavior: Some New Empirical Estimates," (with John D. Graham), American Economic Review, Papers and Proceedings, May 1984.

"The Political Economy of Clean Air: Practical Constraints on White House Review," in V. Kerry Smith, Environmental Policy Under Reagan's Executive Order: The Role of Benefit-Cost Analysis, University of North Carolina Press, 1984.

"The Marketplace: Economic Implications of Divestiture," (with Bruce M. Owen), in Harry M. Shooshan III, <u>Discounting Bell: The Impact of the AT&T Divestiture</u>, Pergamon Press, 1984.

"Environmental Policy in the Reagan Administration," (with Paul R. Portney), in Paul R. Portney (ed.), Natural Resources and the Environment: The Reagan Approach, The Urban Institute and Resources for the Future, 1984.

"The Emerging Competition in the U.S. Telecommunications Market" in <u>New Opportunities for Entrepreneurship</u>, The Kiel Institute, 1984.

"Deregulation: The U.S. Experience," Zeitschrift für die gesamte Staatswissenshaft, October 1983, pp. 419 - 434.

Review of John Zysman and Laura Tyson, American Industry in International Competition, Science, Vol. 222, October 21, 1983.

"Air Pollution, Environmentalists, and Coal Lobby," in Roger G. Noll and Bruce M. Owen (eds.), The Political Economy of Deregulation, American Enterprise Institute, 1983.

"The Use of Environmental Policy to Reduce Economic Growth in the Sun Belt: The Role of Electric-Utility Rates" in Michael A. Crew (ed.), Regulatory Reform and Public Utilities, Lexington Books, 1982.

"The Cost of Automobile Safety and Emissions Regulation to the Consumer: Some Preliminary Results," (with Theodore E. Keeler and Lester B. Lave), <u>American Economic Review</u>, May 1982.

"Environmental Policy," Regulation, March/April 1982.

"Has Reagan Dropped the Ball?" in Regulation, November/December 1981.

"The Use of Cost-Benefit Analysis in Regulatory Decision-Making," Annals New York Academy of Sciences, 1981. "The Deregulation of Cable Television," (with Stanley M. Besen), Law and Contemporary Problems, Duke University School of Law, Vol. 44, No. 1, Winter 1981.

"The Impossibility of Finding a Mechanism to Ration Health Care Resources Efficiently" in A New Approach to the Economics of Health Care, Mancur Olson (ed.), American Enterprise Institute for Public Policy Research, 1981.

"Pollution Controls and Productivity Growth in Basic Industries" in <u>Productivity Measurement in Regulated Industries</u>, Academic Press, 1981.

"Where is the Public Interest in Broadcasting Regulation?" in Regulation and the Future Economic Environment-Air to Ground, Charles F. Phillips, Jr. (ed.), December 1980.

"The Environmental Protection Agency," (On Saving the Kingdom: Advice for the President-Elect), Regulation, November/December 1980.

"Steel Imports: Dumping or Competition?" in Regulation, July/August 1980.

"Regulation and Productivity Growth" in <u>Proceedings: Conference on Productivity</u>, Federal Reserve Bank of Boston, Martha's Vineyard, June 1980.

"The Prospects for Regulatory Reform," Government Regulation: New Perspectives, Andrew Blair, ed., Pittsburgh: University of Pittsburgh, 1980.

"The Economics of the Current Steel Crisis in OECD Member Countries" in <u>Steel in the</u> 80's, Organisation for Economic Co-operation and Development, Paris, 1980.

"Environmental Control Is Out of Control," Chemical and Engineering News, Vol. 57, April 23, 1979.

"Paying for Government Policy Through the Price Level" in Clarence C. Walton (ed.), Inflation and National Survival, 1979.

"Is Government Regulation Crippling Business?" in Saturday Review, January 20, 1979.

"Federal Government Initiatives to Reduce the Price Level," <u>Brookings Papers on Economic Activity</u>, 1978:2.

"Competition and Dumping in the U.S. Steel Market," Challenge, July/August 1978.

"Regulation of Television Broadcasting: How Costly is the Public Interest?" in Regulation, January/February 1978.

"Placing a Value on the Electromagnetic Spectrum: A Suggested Approach for FCC Decision-Making," Proceedings of the Conference on Telecommunications Policy Research, Airlie House, 1977.

"Theoretical Issues in the Regulation of Communications Common Carriage" in <u>Rate of Return Regulation</u>, FCC Future Planning Conference, July 1976.

"The Postwar Performance of the Motion Picture Industry," The Antitrust Bulletin, Spring 1975. "An Econometric Model of the Low-Skill Labor Market," (with C.D. MacRae and Lorene Y.L. Yap), The Journal of Human Resources, Winter 1975.

"The Economic Case for a Fourth Commercial Television Network," <u>Public Policy</u>, Harvard University Press, Fall 1974.

"The Profitability of Cable Television: An Analysis of Acquisition Prices," <u>The Journal of Business</u>, University of Chicago, October 1974.

"A Reexamination of the Prophecy of Doom for Cable Television," (with Lionel L. Fray), The Bell Journal of Economics and Management Science, Spring 1974.

"Monopoly," The Dictionary of American History, Charles Scribner's & Sons, 1973.

"FCC Regulation, Monopsony, and Network Television Program Costs," <u>The Bell Journal of Economics and Management Science</u>, Autumn 1972.

Study Guide for Basic Economics (with R.S. Eckaus), Little, Brown and Company, 1972.

Contemporary Issues in Economics: Selected Readings (with R.S. Eckaus), Little, Brown and Company, 1972.

"Economic Subsidies in the Urban Ghetto," (with C.D. MacRae), Social Science Quarterly, December 1971.

"The Economic Effect of Television-Network Program 'Ownership'," The Journal of Law and Economics, Vol. XIV, October 1971.

"The Decline of the Franchised Dealer in the Automobile Industry," <u>The Journal of Business</u>, University of Chicago, January 1970.

"Motor Vehicle Repair, Repair-Parts Production, and the Franchised Vehicle Dealer," Hearings: The Automobile Industry, U.S. Senate Antitrust Subcommittee of the Committee on the Judiciary, 1969.

"Vertical Integration and the Market for Repair Parts in the United States Automobile Industry," The Journal of Industrial Economics, Oxford: Basil Blackwell, July 1968.

# **CERTIFICATE OF SERVICE**

I hereby certify that on this 19th day of December, 1996 a copy of the foregoing "Comments of Bell Atlantic" was sent by first class mail, postage prepaid, to the parties on the attached list.

Tracey De Vaux

<sup>\*</sup> Via hand delivery.

The Honorable Reed E. Hundt, Chairman\*

—Federal Communications Commission
1919 M Street, NW -- Room 814
Washington, DC 20554

The Honorable Rachelle B. Chong, Commissioner\*
Federal Communications Commission
1919 M Street, NW
Room 844
Washington, DC 20554

The Honorable Susan Ness, Commissioner\*
Federal Communications Commission
1919 M Street, NW -- Room 832
Washington, DC 20554

International Transcription Service\*
Room 246
1919 M Street, NW
Washington, DC 20054

The Honorable Julia Johnson, Commissioner
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Sheryl Todd Federal Communications Commission Common Carrier Bureau 2100 M Street, NW Room 8611 Washington, DC 20554

(Diskette version)

The Honorable Kenneth McClure, Commissioner Missouri Public Service Commission —301 W. High Street Suite 530 Jefferson City, MO 65101 The Honorable Sharon L. Nelson, Chairman Washington Utilities and Transportation Commission
PO Box 47250
Olympia, WA 98504-7250

The Honorable Laksa Schoenfelder, Commissioner
South Dakota Public Utilities Commission
State Capitol
500 E. Capital Avenue
Pierre, SD 57501

Martha S. Hogerty
Public Counsel for the State of Missouri
PO Box 7800
Jefferson City, MO 65102

Lisa Boehley
Federal Communications Commission
-2100 M Street, NW
Suite 8605
Washington, DC 20554

Paul E. Pederson, State Staff Chair Missouri Public Service Commission PO Box 360 Jefferson City, MO 65102

\_\_Deonne Bruning
Nebraska Public Service Commission
300 The Atrium
\_\_1200 N Street
P.O. Box 94927
Lincoln, NE 68509-4927

Charles Bolle South Dakota Public Utilities Commission State Capital, 500 E. Capital Avenue Pierre, SD 57501-5070

Lorraine Kenyon
Alaska Public Utilities Commission
1016 West Sixth Avenue
Suite 400
Anchorage, AK 99501

Debra M. Kriete Pennsylvania Public Utilities Commission PO Box 3265 Harrisburg, PA 17105-3265

Mark Long
Florida Public Service Commission
2540 Shumard Oak Blvd.
Gerald Gunter Building
Tallahassee, FL 32399-0850

Samuel Loudenslager Arkansas Public Service Commission PO Box 400 Little Rock, AR 72203-0400

Sandra Makeeff

Lowa Utilities Board

Lucas State Office Building

Des Moines, IA 50319

Philip F. McClelland Pennsylvania Office of Consumer Advocate 1425 Strawberry Square Harrisburg, PA 17120 Michael A. McRae
DC Office of the People's Counsel
1133 15th Street, NW
Suite 500
Washington, DC 20005

Terry Monroe New York Public Service Commission Three Empire Plaza Albany, NY 12223

Mark Nadel
Federal Communications Commission
2100 M Street, NW
Room 8916
Washington, DC 20554

Lee Palagyi Washington Utilities and Transportation Commission 1300 South Evergreen Park Drive S.W. Olympia, WA 98504

Jeanine Poltronieri
\_Federal Communications Commission
2100 M Street, NW
Room 8924
Washington, DC 20554

James Bradford Ramsay
National Association of Regulatory Utility
Commissioners
P.O. Box 684
Washington, DC 20044-0684

James Casserly\*
Federal Communications Commission
Office of Commissioner Ness
1919 M Street, NW
Room 832
Washington, DC 20554

Brian Roberts California Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102

Gary Seigel

- Federal Communications Commission
2000 L Street, NW
Suite 812

- Washington, DC 20554

Pamela Szymczak Federal Communications Commission 2100 M Street, NW Suite 8912 Washington, DC 20054